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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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OF THE YEAR 1900.

EXAMINER


ART UNIT	PAPER NUMBER
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09 403,912	Applicant(s) Karhunen et al.	
Examiner José A. Fortuna	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 28, 1999
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 28, 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|--|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO 892) | 18) <input type="checkbox"/> Interview Summary (PTO 413) Paper No(s): _____ |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO 948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s): <u>3</u> | 20) <input type="checkbox"/> Other _____ |

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "13" has been used to designate a "soft roll coating," page 5, line 19, a "coating," in page 5, line 31 and a "roll coating," in page 6, line 1. It is suggested to use "soft roll coating" in every instance. Correction is required.

Claim Rejections - 35 U.S.C. § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 9, the phrase "an additional weight," lacks of sufficient antecedent basis, because it implies that there is/are other weight(s), and those have not been previously recited. In claims 4 and 12, the phrase "has been made as desired" renders the claim vague and confusing, since frequencies are not made, but obtained. It is suggested to change the phrase to a language such as, "when the tuning frequency desired has been obtained. . ." Note that this is just a suggestion which should not interpreted as a "requirement." Regarding claims 8, 20 and 25, the phrase "or equivalent" renders the claim(s) indefinite because the claim(s) include(s) elements not

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actually disclosed (those encompassed by "or equivalent"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arnhold et al., US Patent No. 5,096,541.

Regarding claims 1, 3 and 9, Arnhold et al. teach a method and device to damp the vibrations on a paper-making machine. Arnhold et al. teach that the dampening is done by the use of system which detects the natural frequency of the vibrating system, and damp the vibration by moving a mass, weight, see abstract and column 1, line 60 through column 2, line 14 and column 2, line 57 through column 3, line 4. Arnhold et al., also teach that the device can be used to damping the vibration on different parts of a papermaking machine, such as breastboxes, frames and the mounting of rotating mass, rollers, etc., see column 4, lines 14-27 and more specifically in column 3, line 58 through column 4, line 3. It seems that Arnhold et al. invention teach all the limitations of the claims or at least the minor modifications to obtain the system would have been obvious to one of ordinary skill in the art. Regarding claims 2 and 10, Arnhold et al., teach a control unit which can contain a device to analyze the frequencies of vibration of the structure and

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can separate the vibrating natural forms and can determine the kinematic quantities of the additional mass relative to the corresponding natural forms, see column 2, line 57 through column 3, line 4. Regarding claims 4, 5, 12 and 17, even though Arnhold et al. are silent with respect to locking mechanism of the additional mass weight, this is either inherent to their invention or at least would have been obvious to one of ordinary skill in the art, since the mass/weight **Must** be retained in the selected position so that the vibrations of the vibrating equipment do not move the mass/weight withing the system and doing so **changing** the desired frequency of the dampening system. Regarding claims 6-8, 11, 13-16, 18-26, Arnhold et al. suggest in abstract that the force effect of the servo motor can be caused by a pressure medium by piezo crystals or by magnetostrictive elements, i.e. the spring of the of the dynamic damper can be made of the different disclosed elements, see also column 3, lines 35-57. While the specifics of how the elements act, the manner in which the disclose elements function is very well known in the art and equivalent to the ones claimed. Note that Arnhold et al. show in the figures a mass (3) which moves along a horizontal rod, see figure 1, a hydraulic piston (2) in figure 3, and piezo crystal and/or an electromagnet (9, 10, 4, 2) in figure 4.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Paper Machine Dampening Mechanisms."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to José Fortuna, whose telephone number is (703)305-7498. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:30 P.M.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman, can be reached on (703)308-3837. The fax number for this group is (703)305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0661.

When filing a FAX in group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

José A. Fortuna
May 10, 2001


JOSÉ FORTUNA
PATENT EXAMINER
ART UNIT 1731